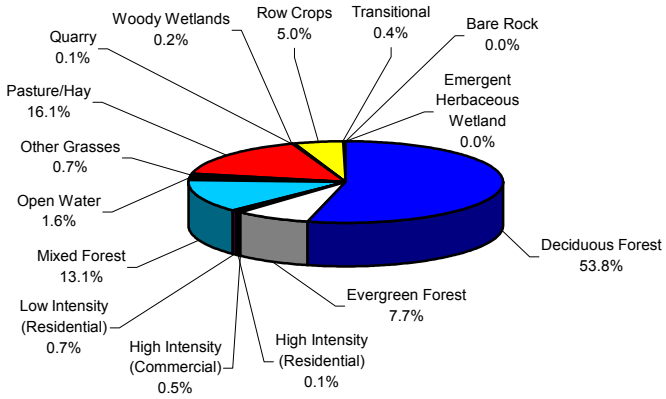
Summary – Caney Fork River

In 1996, the Tennessee Department of Environment and Conservation Division of Water Pollution Control adopted a watershed approach to water quality. This approach is based on the idea that many water quality problems, like the accumulation of point and nonpoint pollutants, are best addressed at the watershed level. Focusing on the whole watershed helps reach the best balance among efforts to control point sources of pollution and polluted runoff as well as protect drinking water sources and sensitive natural resources such as wetlands. Tennessee has chosen to use the USGS 8-digit Hydrologic Unit Code (HUC-8) as the organizing unit.

The Watershed Approach recognizes awareness that restoring and maintaining our waters requires crossing traditional barriers (point *vs.* nonpoint sources of pollution) when designing solutions. These solutions increasingly rely on participation by both public and private sectors, where citizens, elected officials, and technical personnel all have opportunities to participate. The Watershed Approach provides the framework for a watershed-based and community-based approach to address water quality problems.

Chapter 1 of the Caney Fork River Watershed Water Quality Management Plan discusses the Watershed Approach and emphasizes that the Watershed Approach is not a regulatory program or an EPA mandate; rather it is a decision-making process that reflects a common strategy for information collection and analysis as well as a common understanding of the roles, priorities, and responsibilities of all stakeholders within a watershed. Traditional activities like permitting, planning and monitoring are also coordinated in the Watershed Approach.

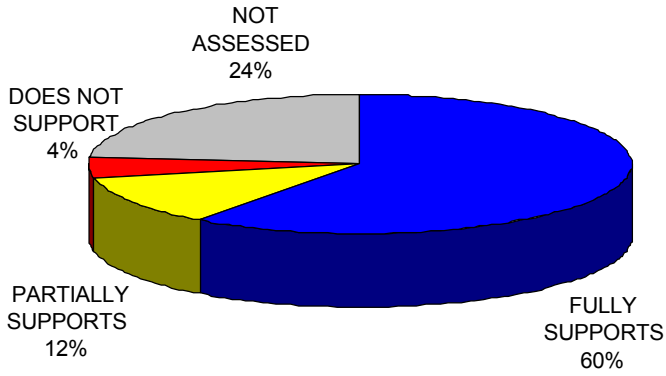
A detailed description of the watershed can be found in Chapter 2. The Caney Fork River Watershed is approximately 1,771 square miles and includes parts of 11 Middle Tennessee counties. A part of the Cumberland River drainage basin, the watershed has 2,038 stream miles and 25,817 lake acres.



Land Use in the Caney Fork River Watershed is based on MRLC Satellite Imagery.

Five Designated State Natural Areas, six interpretive areas, and one wildlife management area are located in the watershed. Sixty rare plant and animal species have been documented in the watershed, including four rare fish species, seven rare mussel species, one rare snail species, and one rare crustacean species. Portions of eight streams in the Caney Fork River Watershed are listed in the National Rivers Inventory as having one or more outstanding natural or cultural values.

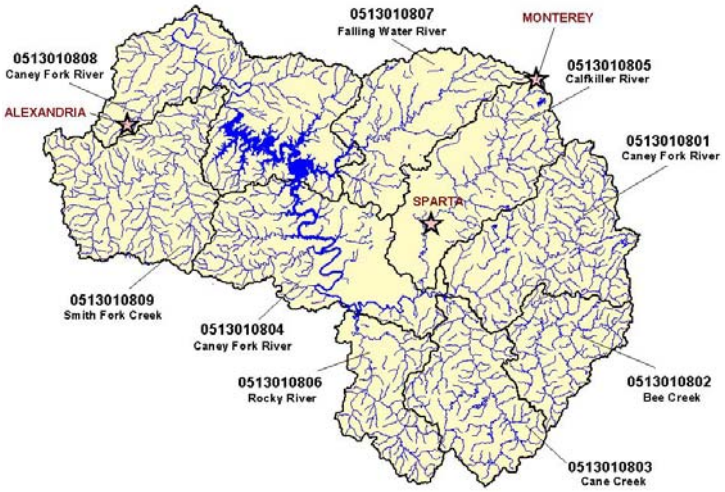
A review of water quality sampling and assessment is presented in Chapter 3. Using the Watershed Approach to Water Quality, 164 sampling sites were utilized in the Caney Fork River Watershed. These were ambient, ecoregion or watershed monitoring sites. Monitoring results support the conclusion that 60% of total stream miles (based on RF3) fully support designated uses.



Water Quality Assessment in the Caney Fork River Watershed is Based on the 1998 303(d) List.

Also in Chapter 3, a series of maps illustrate Overall Use Support in the watershed, as well as Use Support for the individual uses of Fish and Aquatic Life Support, Recreation, Irrigation, and Livestock Watering and Wildlife. Another series of maps illustrate streams that are listed for impairment by specific causes (pollutants) such as Organic Enrichment/Low Dissolved Oxygen, Pathogens, Habitat Alteration and Siltation.

Point and Nonpoint Sources are addressed in Chapter 4, which is organized by HUC-10 subwatersheds. Maps illustrating the locations of STORET monitoring sites and USGS stream gauging stations are presented in each subwatershed.



HUC-10 Subwatersheds in the Caney Fork River Watershed.

Point source contributions to the Caney Fork River Watershed consist of 21 individual NPDES-permitted facilities, four of which discharge into streams that have been listed on the 1998 303(d) list. Other point source permits in the watershed are Aquatic Resource Alteration Permits (70), Tennessee Multi-Sector Permits (48), Mining Permits (20), and Water Treatment Plant Permits (3). Agricultural operations include cattle, chicken, hog, and sheep farming. Maps illustrating the locations of NPDES and ARAP permit sites are presented in each subwatershed.

Chapter 5 is entitled *Water Quality Partnerships in the Caney Fork River Watershed* and highlights partnerships between agencies and between agencies and landowners that are essential to success. Programs of federal agencies (Natural Resources Conservation Service, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Geological Survey), and state agencies (TDEC Division of Community Assistance, TDEC Division of Water Supply, and Tennessee Department of Agriculture) are summarized. Local initiatives of active watershed organizations (Cumberland River Compact) are also described.

Point and Nonpoint source approaches to water quality problems in the Caney Fork River Watershed are addressed in Chapter 6. Chapter 6 also includes comments received during public meetings, along with an assessment of needs for the watershed.

The full Caney Fork River Watershed Water Quality Management Plan can be found at: http://www.state.tn.us/environment/wpc/watershed/wsmplans/.